

PCT

INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference PP20504.002	FOR FURTHER ACTION see Form PCT/ISA/220 as well as, where applicable, item 5 below.	
International application No. PCT/US2004/034169	International filing date (day/month/year) 15/10/2004	(Earliest) Priority Date (day/month/year) 15/10/2003
Applicant CHIRON CORPORATION		

This International Search Report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This International Search Report consists of a total of 6 sheets.

☒ It is also accompanied by a copy of each prior art document cited in this report.

1. Basis of the report

- a. With regard to the **language**, the international search was carried out on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.

☐ The international search was carried out on the basis of a translation of the international application furnished to this Authority (Rule 23.1(b)).

- b. ☐ With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, see Box No. I.

2. ☒ **Certain claims were found unsearchable** (See Box II).

3. ☐ **Unity of invention is lacking** (see Box III).

4. With regard to the title,

☒ the text is approved as submitted by the applicant.

☐ the text has been established by this Authority to read as follows:

5. With regard to the abstract,

☐ the text is approved as submitted by the applicant.

☒ the text has been established, according to Rule 38.2(b), by this Authority as it appears in Box No. IV. The applicant may, within one month from the date of mailing of this international search report, submit comments to this Authority.

6. With regards to the drawings,

- a. the figure of the **drawings** to be published with the abstract is Figure No. _____

☐ as suggested by the applicant.

☐ as selected by this Authority, because the applicant failed to suggest a figure.

☐ as selected by this Authority, because this figure better characterizes the invention.

- b. ☐ none of the figures is to be published with the abstract.

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Box No. IV Text of the abstract (Continuation of item 5 of the first sheet)

The present invention discloses methods and compositions for viral inhibition, particularly inhibition of HCV and SARS. The invention also provides compositions including carbazole derivatives useful for viral inhibition.

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International Application No

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A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 C07D209/90 C07D209/94 C07D401/12 C07D405/12 C07D417/12
A61K31/403 A61P31/14

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
IPC 7 C07D

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, CHEM ABS Data, PAJ, WPI Data

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	WO 01/49662 A (LIN HO SHEN ; LILLY CO ELI (US); RICHETT MICHAEL ENRICO (US)) 12 July 2001 (2001-07-12) page 1, paragraph 1 page 2, paragraph 2 page 3, formula (I) page 80, paragraph 3 examples	1-104
A	WO 01/51479 A (WARNER LAMBERT CO ; BOOTH RICHARD JOHN (US); JOSYULA VARA PRASAD VENKA) 19 July 2001 (2001-07-19) page 1, paragraph 1 page 2, paragraph 1 page 10, paragraph 2 examples 432-446 ----- -/--	1-104

☒ Further documents are listed in the continuation of box C.☒ Patent family members are listed in annex.

* Special categories of cited documents :

- *A* document defining the general state of the art which is not considered to be of particular relevance
- *E* earlier document but published on or after the international filing date
- *L* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- *O* document referring to an oral disclosure, use, exhibition or other means
- *P* document published prior to the international filing date but later than the priority date claimed

- *T* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- *X* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- *Y* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- * & * document member of the same patent family

Date of the actual completion of the international search

4 January 2005

Date of mailing of the international search report

12/01/2005

Name and mailing address of the ISA

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INTERNATIONAL SEARCH REPORT

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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	WO 03/050119 A (DELLARIA JOSEPH F ; 3M INNOVATIVE PROPERTIES CO (US); MERRILL BRYON A) 19 June 2003 (2003-06-19) page 1, line 9 page 2, formula (I) page 28, lines 31,32; examples -----	1-104

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International application No.
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Box II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☒ Claims Nos.:
because they relate to subject matter not required to be searched by this Authority, namely:

Although claims 1-59 AND 89-104 are directed to a method of treatment of the human/animal body, the search has been carried out and based on the alleged effects of the compound/composition.
2. ☐ Claims Nos.:
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:
3. ☐ Claims Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this International application, as follows:

1. ☐ As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☐ No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
- ☐ No protest accompanied the payment of additional search fees.

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/US2004/034169

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
WO 0149662	A	12-07-2001	AU 4599601 A	16-07-2001
			EP 1248769 A2	16-10-2002
			WO 0149662 A2	12-07-2001
			US 2004204473 A1	14-10-2004
WO 0151479	A	19-07-2001	AU 1808501 A	24-07-2001
			BR 0016937 A	31-12-2002
			CA 2396560 A1	19-07-2001
			EP 1248777 A2	16-10-2002
			JP 2003519693 T	24-06-2003
			WO 0151479 A2	19-07-2001
			US 2003229073 A1	11-12-2003
WO 03050119	A	19-06-2003	US 2002107262 A1	08-08-2002
			BR 0214749 A	31-08-2004
			CA 2468164 A1	19-06-2003
			CA 2468174 A1	19-06-2003
			CA 2468659 A1	19-06-2003
			EP 1453829 A1	08-09-2004
			EP 1451186 A2	01-09-2004
			EP 1451187 A1	01-09-2004
			HR 20040503 A2	31-12-2004
			HR 20040504 A2	31-12-2004
			HR 20040506 A2	31-12-2004
			WO 03050117 A1	19-06-2003
			WO 03050118 A1	19-06-2003
			WO 03050119 A2	19-06-2003
			US 6525064 B1	25-02-2003
			US 6545016 B1	08-04-2003
			US 6545017 B1	08-04-2003
			US 2004019076 A1	29-01-2004
			US 2003186949 A1	02-10-2003
			US 2003195209 A1	16-10-2003
			US 2003162806 A1	28-08-2003
			US 2003176458 A1	18-09-2003
			US 2004147533 A1	29-07-2004
			US 2004157879 A1	12-08-2004
			US 2004186128 A1	23-09-2004